CRYSTAL RESONANCER

SERIES 6K6 / 2X6MM TUNING FORK WATCH CRYSTAL

深圳市晶科鑫实业有限公司

Shenzhen Crystal Technology Industrial Co., Ltd

APPROVAL SHEET

CUSTOMER P/N:		
TYPE:	CRYSTAL	
DESCRIPTION:	圆柱 JU2*6 32.768KHZ 12.5PF ±20PPM -40~85℃	
P N/ SJK:	6K632768F06UB	
ENVIRONMENTAL:	■RoHS ■REACH ■HF □PAHS □other	
REVISION:	A1 2015-4-8	MOQ: 1000pcs/real
MSL:	Levels 1	

SIGNATURE					
SUPPLIER			CUSTOMER		
Issue	Check	Approve	QA	Check	Approve
SJK			Signature		
FAE_EMAIL			Date		
Date			Approve: □accept		□unaccepted
Note:					

CRYSTAL RESONANCER

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1. FEATURE

- Small size

2. APPLICATIONS

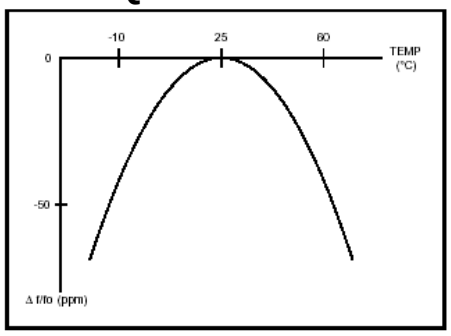
- Microprocessor Systems
- Consumer Electronics

3. ELECTRICAL SPECIFICATIONS

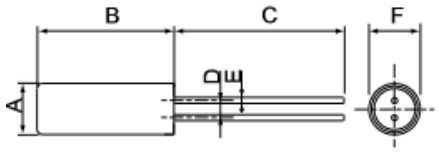
Frequency	32.768KHz
Frequency Tolerance (at 25°C)	±20 ppm
Load Capacitance(C_L)	6.0PF
ESR	35 KΩ Max
Turnover Temperature	25 ± 2°C
Frequency Temperature Curve	-0.04ppm/°C² MAX
Operating Temperature Range	-40 °C to +85°C
Storage Temperature Range	-40 °C to +85 °C
Shunt Capacitance (C0)	0.9pF Typ
Dynamic Capacitance (C1)	2.0fF Typ
Driver Level (Typical)	1 μW Max
Insulation Resistance	100MΩ MIN at DC100V±15V
Aging @25°C 1st year (Max)	±3ppm/year max

REMARK: SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE. PLEASE CONFIRM WITH OUR SALES ENGINEER.

4. FREQUENCY VS TEMPERATURE CURVE

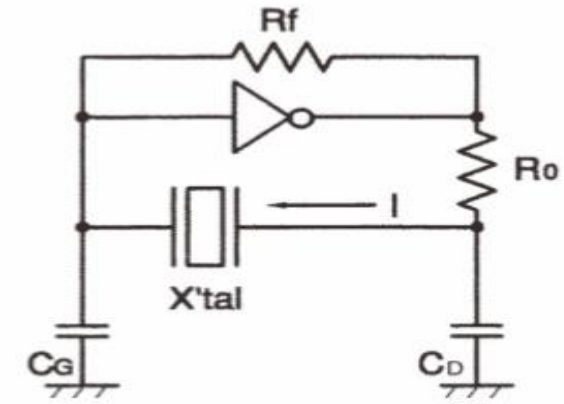


5. PACKING AND DIMENSIONS (Units: mm)



Type	A	B	C	D	E	F
6K6	Ø2.0	6.0±0.3	7.0±0.3	0.7±0.2	0.2±0.1	Ø2.0±0.1
6K8	Ø3.0	8.0±0.3	10.0±0.3	1.1±0.2	0.3±0.1	Ø3.0±0.1

6. OSCILLATION CIRCUIT



$$C_L = \frac{C_g \times C_d}{C_g + C_d} + C_s$$

7. Environment-proof · Mechanical property

No	Item	Specifications	Conditions	
1	High temperature storage	△f/f =±5 × 10-6	After storage under 85℃ for 500 hrs, measure at room temperature.	1
2	Low temperature storage	△f/f =±5 × 10-6	After storage under -40℃ for 500hrs, measure at room temperature	1
3	High temperature and high humidity storage	△f/f =±5 × 10-6	After storage under 60℃±2℃, 90 to95% RH for 500 hrs, measure at room temperature。	1
4	Thermal shock resistance	△f/f =±5 × 10-6	Measured at room temperature after20 cycles. -25℃⇔+80℃ for 30 minutes.	1
5	Mechanical shock resistance	△f/f =±5 × 10-6	Measure after free drop of the RESONATOR three times from the height of 75cm onto a wooden board.	2
6	Vibration resistance	△f/f =±5 × 10-6	Amplitude 1.5mm and 10～60Hz with cycle time 2～3 minutes in 3 direction (X,Y,and Z axis)each for 2 hrs.	2
7	Resistance to soldering heat	△f/f =±5 × 10-6	Measured at room temperature after immersing the lead wire in a soldering bath of 300℃±10℃ for 5 seconds up to a position where it is2mm away from the root of the plug.	1
8	Tensile strength of lead wire	△f/f =±5 × 10-6	Apply a load of 500g for 30 seconds in the lead wire's axial direction.	2
9	Bending strength of lead wire	△f/f =±5 × 10-6	Bending cycle : 0° → 45° → 0° → 45° → 0°	2
10	Solderability of lead wire	A minimum 95% of the area to be coated with solder	Apply resin-flux contained-solder to a soldering iron of 280℃±5℃ for 5 seconds.	2

Note:
1. The adove tests no. 1 to 9 must be conducted independently (not series tests)
2. *1: Measure after 24 hours soak at room temperature .
3. *2: Measure after 2 hours soak at room temperature .

8. Precautions

(1) Temperature for soldering the lead wire shall not exceed 300℃ and the soldering time shall be within 5 seconds.
(2) Position to be soldered : Solder only the position where the lead wire is1.0mm away from the glass seal.
Do not solder the case.
(3) Cutting, bending and
correction of lead wire: The glass seal shall be free of any crack or other damage which may deteriorate the characteristics
of RESONATORS.